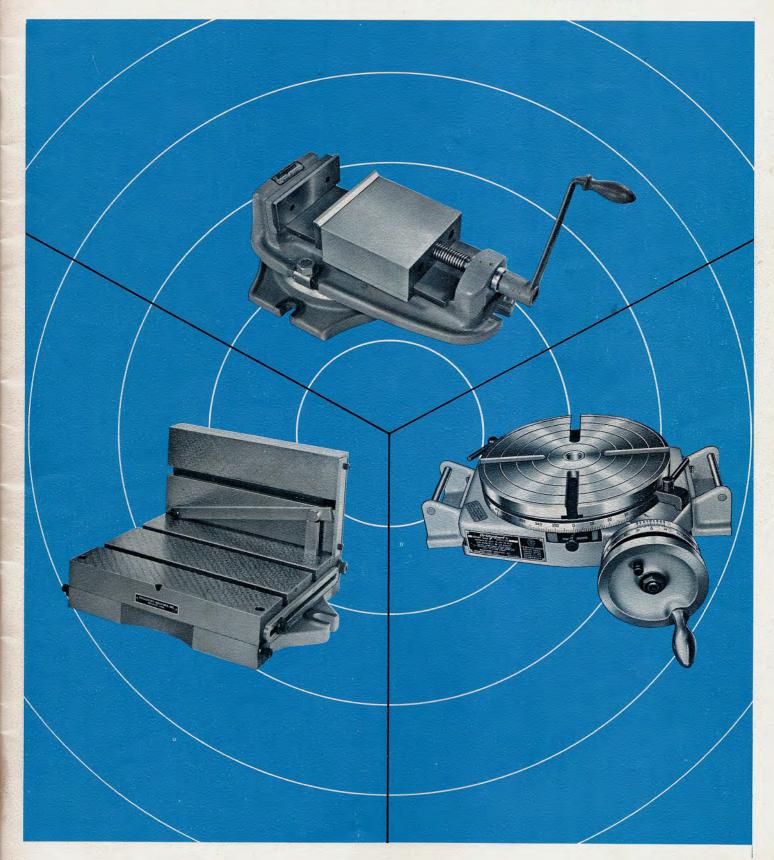


Bridgeport Machines Division of Textron Inc.

W. SIEGRIST MACHINERY CO., INC.
1739 SHELBY STREET
INDIANAPOLIS, INDIANA 46203

Attachments and Accessories for Milling Machines Duplicating Machines Grinders

CATALOG C-109D



Contents

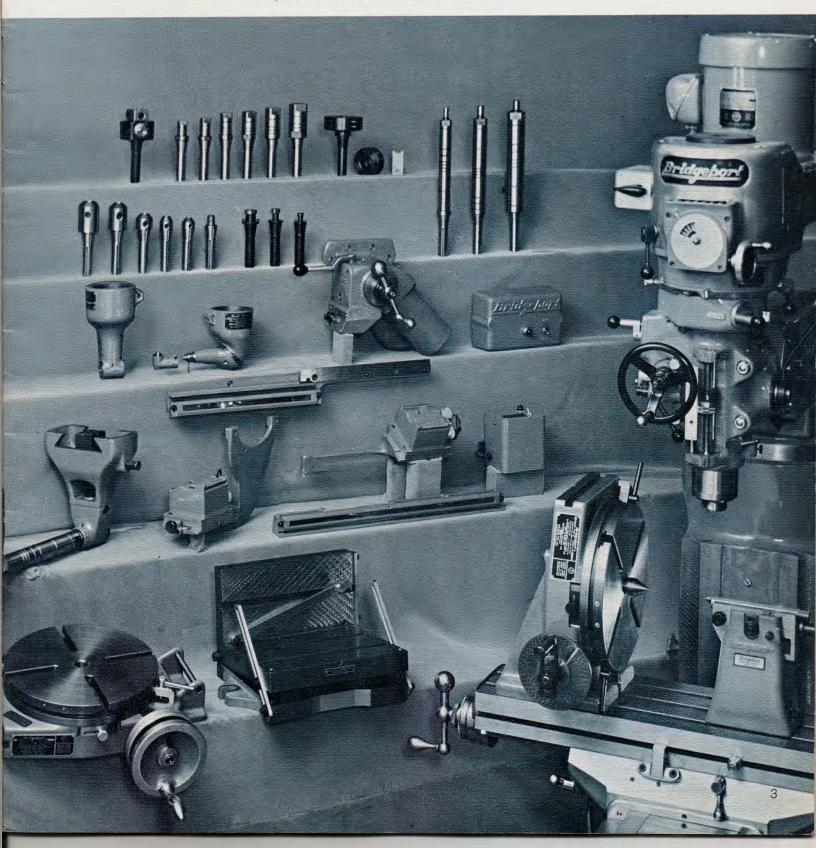
Milling Machine Attachments p	age
and Accessories	3131
Coolant systems	10
Flood coolant	
Mist coolant	
Cross travel stop	
Digital readout	1000
Electrical controls	. 11
Head for Series II	. 5
Heads—attachments	6
QRA	6
Quillmaster	
Right angle Heads for Series I	
Model E	. 5
Model J	
Model M	
Model 2J	
Infinitely variable power feed	
Lubrication systems	
Mounting adapters	
Optical measuring system	
Power down-feed	
Riser blocks	
Tooling and tooling aids	
Adapters	. 15
Arbors and spacers	
Boring head tools and shanks	2000
Boring heads	
Chucks	
Collets	
End mill holders	
Fly cutters	
Quick change tooling	
Shaping tool set	. 12
Shell mill holders	. 16
Stub arbors and spacers	
Work holding and positioning aids	
Attachments for rotary tables	. 19
Combination sine tables	. 18
5" (127mm) multi-purpose vise	. 17
Hold down nut and bolt set	
Metric conversion kits	
Plain and swivel vises	
Plain sine tables	
Rotary tables	. 19
Spare parts kits	
Work lights	. 9
Duplicator Accessories	
Power table feed and pick feed	
assembly	. 21
Scribe-master	. 21
Template tables	
Tracing stylus	. 21
Vertical pick feed	. 21
Grinder Accessories	
Coolant systems	. 22
Dust collector	22
Electrical controls	22
Grinding wheel dresser	22
Magnetic chucks	22
Metric leadscrews and dials	. 22
Wheel adapters	. 22
Manuals	23
Sales and service network	23
Training Aids	23

Introduction

Bridgeport attachments and accessories extend the capabilities of your Bridgeport machine. Attachments and accessories are not luxuries, they are practical devices and instruments to help you attain maximum dollar value from the production of your machine.

Through the use of proper attachments and accessories your Bridgeport can do almost every job in your shop. Increased production rates, higher quality parts, greater machine flexibility, even doing jobs that normally could not be done — these added values can be yours with Bridgeport accessories. Most attachments and accessories can be used with both Series I and Series II Bridgeport standard machines.

Your Bridgeport dealer can help you select the attachments and accessories you need. And you can add to your capabilities as the need arises.



Heads for Series I

Bridgeport heads were designed to do a specific job, to meet a definite need. And they do the job — extremely well. Don't overlook how other heads may add expanded profitability to your machine. They can be used as replacements of heads on machines, mounted on the rear of the ram of Series I, on duplicators for multiple head machining and for special applications. The heads can be equipped with metric quill stop micrometer and scale. (See page 6 for information on mounting adapters.)

Model J

The 1 and 11/2 hp Model J milling, drilling and boring heads provide unmatched dollar value for power and accuracy. They are equipped with power down-feed and power up-feed and offer extreme sensitivity provided by a counterbalanced quill and spindle. A separate lever allows rapid manual movement of the quill up or down; small movement is obtained through a separate hand wheel and angular positioning through an integral worm and gear. Model J features include positive quill lock; switch to reverse spindle rotation; micrometer depth stop graduated in thousandths on inch machines and .02mm on metric machines; back-geared spindle drive for maximum use of power: and positive two-way power feed tripping mechanism. The J head is equipped with a switch to reverse spindle rotation.

Model 2J

This 2 hp (1.5kW), variable speed milling, drilling and boring head is now more powerful than ever. Among its outstanding features are: infinitely variable speeds from 60 to 4200 rpm; power down-feed and up-feed; counter-balanced quill and spindle; angular positioning obtained through an integral worm and gear; positive quill lock; micrometer depth stop graduated in thousandths on inch machines and .02mm on metric machines; positive two-way power feed tripping mechanism. A separate lever-controlled manual feed provides for rapid movement of quill while small movement is controlled by means of a separate hand wheel. The 2J is equipped with a switch to reverse spindle rotation. The patented flow-through air cooling system minimizes distortion of the spindle.



Specifications	1800 RPM	odel J 3600 RPM	Model 2J
Code #	2190015	2190016	255000
Rating-hp (kW)	1 (.75 kW)	1 (.75kW) 1½ (1.13kW)	2.0 (1.5kW)
Drilling capacity manual power feed	³ / ₄ (19) dia. ³ / ₈ (9) dia.	¾ (19) dia. ¾ (9) dia.	³ / ₄ (19) dia. ³ / ₈ (9) dia.
Quill travel	5 (127)	5 (127)	5 (127)
Quill power feed rate *	.0015 (.04), .003	(.08), .006 (.15)/rev.	.0015 (.04), .003 (.08), .006 (.15)/rev.
Spindle	R-8 Taper Bridgeport Quick Change		R-8 Taper Bridgeport Quick Change
Spindle speeds-rpm	80, 135, 210, 325, 660, 1115, 1750, 2720	160, 270, 440, 660, 1320, 2200, 3600, 5440	Infinitely variable— 60 to 4200 Back gear—60 to 500 Direct drive—500 to 4200
Stroke			
Stroke per min.			
Overall height	271/4 (699)	271/4 (699)	32 (813)
Overall depth	19 (483)	19 (483)	213/4 (552)
Overall width	18 (457)	18 (457)	18 (457)
Cooling			Pat.flow-through air cooling

Model M

The 1/2 hp (.38kW) Model M is a production head for light-to-medium type of work. Its counter-balanced quill and spindle make it an extremely accurate unit for precision drilling and light cuts. This versatile tool can be used at all angles without changing the work setup. When mounted with a swivel adapter, the Model M provides angle settings in both planes. The spindle has six splines and is driven by a pulley mounted on separate ball bearings. Features include: positive guill lock; rack and pinion feed for drilling and boring; micrometer depth stop graduated in thousandths on inch machines and .02mm on metric machines; and four-bolt mounting for rigidity. (Also available with metric guill stop micrometer and scale.)

Model E

The ½ hp (.25kW) Model E vertical shaping head forms intricate shapes, extruded dies, and complex patterns. The Model E uses a vertical tool motion to shape and can be placed at a right angle or at any vertical or compound angle to the table. This means you can produce shapes normally requiring special machinery or broaching. The Model E head allows work in blind holes where broaches cannot be used, cuts gear teeth and racks and makes sharp internal corners. Strokes from 0"-4" (0-102mm) can be dialed in increments of ½" (3mm).

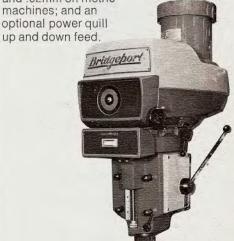
The Model E shaping head can also be fitted to the rear of the ram, and thus it is always available for work by merely swinging it 180° to position it over the table. A shaping tool set is also available (see page 12 under Tooling).



Head for Series II

Model 4J

Designed to meet the requirements of the Bridgeport Series II, this milling, drilling and boring head is rated at 4 hp (3kW) continuous. It is a giant among heads of this type, able to easily take on virtually any job in your shop-with power to spare. The reserve power means reduced wear, longer life and minimal service problems, yet a counterbalanced quill and spindle provide extreme sensitivity. Infinitely variable spindle speeds from 50 to 450 rpm and 450 to 3500 rpm, a 5" (127mm) quill travel, and the patented flow-through air cooling system which minimizes distortion of the spindle, all give you the best machine head. The conveniently located spindle motor load meter helps to optimize performance. The head features an adjustable micrometer depth stop, graduated in thousandths on inch machines and .02mm on metric machines; and an



2 Morse Taper	Model M 7 B&S Taper	B-3 Taper	Mode Standard Speed	Slow Speed	Model 4J	Specifications
2200020	2200017	2200018	2240005	2240045	2172000	Code #
½ (.38kW)	½ (.38kW)	½ (.38kW)	1⁄₃ (.25kW)	⅓ (.25kW)	4 (2.98kW)	Rating-hp (kW)
1/2 (12)	1/2 (12)	1/2 (12)			1¼ (32) dia. ¾ (19) dia.	Drilling capacity (manual) (power feed)
31/2 (89)	31/2 (89)	31/2 (89)			5 (127)	Quill travel
					1/6-21/2 ipm(1.6-63mm/min.) optional power downfeed	Quill power feed rate*
					No. 40 Amer. Std. Taper Bridgeport Quick Change	Spindle
1200 rpm moto 275, 425, 700,		50			Infinitely variable— Low range—50 to 450 High range—450 to 3500	Spindle speeds-rpm
			0-4 (0-102)	0-4 (0-102)		Stroke
			70, 100, 145, 205, 295, 420	35, 50, 70 100, 145, 210		Stroke per min.
213/4 (552)	213/4 (552)	213/4 (552)	2013/6 (529)	2013/6 (529)	44 (1118)	Overall height
17 (432)	17 (432)	17 (432)	17% (443)	17% (443)	32 (813)	Overall depth
125/8 (321)	125/8 (321)	12% (321)	81/8 (206)	81/8 (206)	19 (483)	Overall width
					Pat.flow-through air cooling	Cooling

Power down-feed

Code #2175100

Power down-feed for Series II, 4J head is a reliable, compact attachment for feeding the quill at controlled and accurate rates. Operates on 110V AC power with a potentiometer control of quill feed rate. Up-off-down switch controls feed direction. Up-down feeds are infinitely variable between .2-2.5 ipm (5 to 64mm/min.). Pilot light indicates control is operative.



Mounting adapters

Two types of adapters are available for mounting J, 2J, M, E and 4J on Bridgeport milling machines and special purpose machines.

Toggle adapters

M head mounting on rear of Series I V-Ram — Code # 2060061

E shaper head mounting on rear of Series I V-Ram — Code #2240105



Swivel plate adapters

J, and 2J head mounting on Series I T-Ram and special machines — Code #2100113

J, and 2J head mounting on Series II T-Ram and special machines — Code #2115667

4J head mounting on Series II T-Ram and special machines — Code #2151769 M head mounting on Series I T-Ram and special machines — Code #2100105

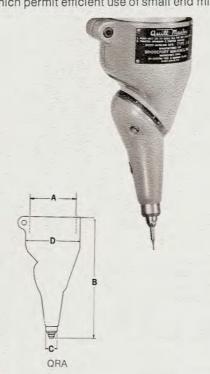


Attachments for heads

Bridgeport has developed attachments which allow you to get the maximum use and versatility from Bridgeport heads. With Bridgeport head attachments, you can do jobs that normally would require special machinery.

Quillmaster

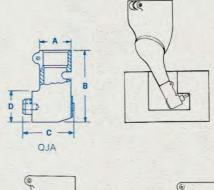
Permits use of small tools at any compound angle with Model M, Model 2J and Model J heads. Supplements the right angle attachments described on this page. High speed and rigidity allow the use of small end mills. Any corner with a small radius can be finish milled or cherried to a degree of sharpness not possible by any other method. The Quillmaster is available with ½" (3mm) collet and ¾" (5mm) solid end mill holder in addition to the ¾" (5mm) spring collet furnished. Rotational speed is increased 50% by Quillmaster attachments which permit efficient use of small end mills.

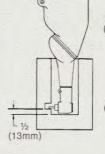


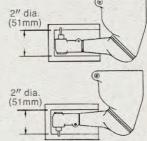
QRA

A right-angle attachment for the Quillmaster, the QRA can operate in a confined space or hole only 2" (51mm) in diameter, and can operate effectively within ½" (13mm) of the wall of the workpiece. QRA operates with equal ease on the inside or outside of irregularly shaped pieces or castings. QRA is a self-contained unit, featuring permanently lubricated bearings and gear housing.









Quillmaster

QRA

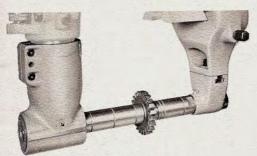
Specifications	M, T heads	2J, J heads	
Code #	1453501	1453500	1453502
A	2% (65)	33/8 (86)	1 (25)
В	9 (229)	9 (229)	25/6 (59)
С	13/6 (21)	13/16 (21)	15/8 (41)
D	31/8 (79)	41/4 (108)	1 (25)
E			
Drilling capacity	3/6 (5)	¾ ₆ (5)	
Min. working space			2 (51)
Collet no.			
Speed reduction			
End mill capacity			3/6 shank (5)

Right angle attachments

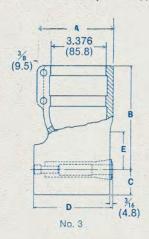
To expand the versatility of the Model 2J and Model J heads, Bridgeport has developed two right angle attachments. Both units are designed to simplify right angle work by reducing the need for special tooling and elaborate fixturing. They are ideal for milling out pockets and cavities. Cutter spindle and driving spindle are mounted in their own anti-friction bearings. Mounting on the proper head is simple and

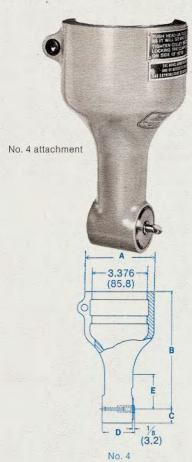
quick, minimizing setup time required for right angle work. The attachments are slipped easily on the quill of the head. The driving shaft is held captive by means of a collet and spindle drawbar; then the right angle attachment clamping screw is tightened to hold the unit firmly to the quill. The No. 3 and No. 4 attachments are for use on Model 2J and J heads, and have aligning pads for quick and easy reference and positioning.

No. 3 attachment will accommodate the standard R-8 collets used with the Model 2J and Model J heads; the No. 4 attachment accepts N-2 collets. These units are made with preloaded ball bearings; hardened and lapped spiral bevel gears lubricated by grease. An auxiliary arbor support is available for use with the No. 3 attachment to increase its versatility in horizontal machining operations.



No. 3 attachment with auxiliary arbor support





Right Angle Attachments

Specifications	No. 3	No. 4
Code #	2320007	2320009
A	41/4 (108)	41/4 (108)
В	65/8 (168)	7%2 (185)
C	1% (40)	27/32 (21)
D	413/6 (122)	131/32 (50)
E	23/8 (60)	23/6 (56)
Drilling capacity	1/8 - 3/4 (3-19)	1/6-1/4 (2-6)
Min. working space	53/4 (146)	25/8 (67)
Collet No.	R-8	N-2
Speed reduction	4 to 3	2 to 1
End mill capacity		

Milling machine attachments

The comprehensive group of attachments for Series I and Series II can add to their versatility, flexibility and most of all productivity — more parts per machine per hour for lower per part cost.

Infinitely variable power feed

Table power feed units reduce operator fatigue. Feeds for both Series I and Series II models are infinitely variable, permitting optimized feed rate resulting in longer tool life. The optional Series I unit fits any table length up to 48" (1219mm). It is powered by a DC motor, has a solid state control with a mechanical drive, an on-off pilot light, rapid traverse jog button and a potentiometer regulated feed. This unit is standard on the Series II Special machine.



Series I 6F Unit Power Feed

Specifications	36" (914mm)	42" (1067mm)	48"(1219mm		
Code #	2630001	2636450	2636452		
Overall height		- 11 (279)			
Overall depth		17 (432)			
Overall width	111/4 (286)				
Table feed (infinitely variable)	3/4-35 ipm (19-889mm/min)				
Table rapid traverse	45 ipm (1143mm/min)				

Hi Torque Power Feed

42" table	48" table	
2636451	2636453	
11	" (279)	
17	" (432)	
11	1/4" (286)	
.3-15 ipm (8-38 mm/r		
15 ipm (381 mm/min)	
	2636451 11 17 11 .3-15 ipm (

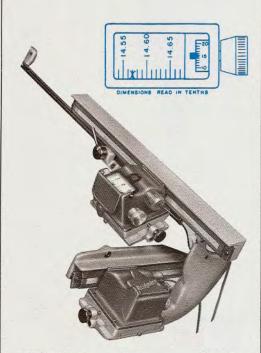
Optical measuring system

A direct reading system designed for the Series I milling machine to permit fast, accurate determination of table position.

The Bridgeport system involves no mechanical contact or the handling of measuring devices. The operator reads only a single line of the scale which is calibrated every .010". Settings to .0010" are obtained through a drum dial that is calibrated in .0001". On metric units scales are calibrated every .10mm and the drum dial is calibrated in .002mm increments. Vernier estimates are not required.

A sliding lateral adjustment is provided to allow establishing the starting point on an even mark.

Features include easily accessible setting knob, jump-proof table clamp, automatic light switch, catch fork system of direct digit reading, setup adjustment for even inches, sensitive parts sealed and protected, and neoprene chip guard. Both the scale and the unit are sealed against foreign matter. Distortion-free clamps keep sliding members in position.

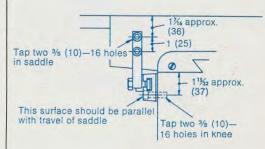


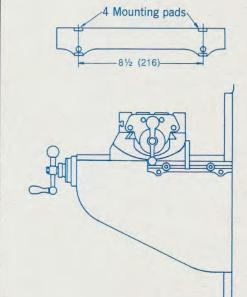
Inch	Metric	
2270001	2270005	
20	508mm	
12	305mm	
17x	17x	
.0001, direct	.002mm	
1	25mm	
	2270001 20 12 17x	

Cross travel stop - Code #2290001

Adjustments allow you to limit the amount of table cross travel to predetermined distances. Selected settings assure positive stop. Easily mounted on either side of knee by tapping 4 holes.







Lubrication systems - Code #1413200

One-shot lubrication systems are standard on Series I machines. Available as a replacement Bridgeport offers an automatic central lubrication system which provides metered lubrication automatically. Precise control makes possible minute uniform oil flow to some bearing surfaces and uniform greater amounts to others. A lubricant saver and a guarantee of no-worry lubrication.



Work lights

Straight prong plug—Code #1062590 Twist prong plug—Code #1152588
Work lights for all Bridgeport Series I and Series II machines are available with straight three-prong plugs for direct plant lighting circuits and twist plugs for use with machines with electrical controls.



Riser blocks

Used to obtain clearance for very large workpieces, riser blocks extend the height range of the Bridgeport Series I miller 4" (102mm) or 7" (178mm). Riser blocks for Series II millers are available in 6" (152mm) heights. Blocks are easily mounted to the column of the machine with four bolts.

(The Series II miller is also available with a 6" (152mm) higher column.)

Series I

4" (102mm) Tool room miller— Code #2580000

7" (178mm) Tool room miller— Code #2580001

4" (102mm) Series I duplicating— Code #2580004

7" (178mm) Series I duplicating—Code #2580005

Series II

6" (152mm) Standard tool room miller— Code #2151765

6" (152mm) Rigid Ram machine— Code #2151218

6" (152mm) Series II T-Ram— Code #2151052



Coolant systems

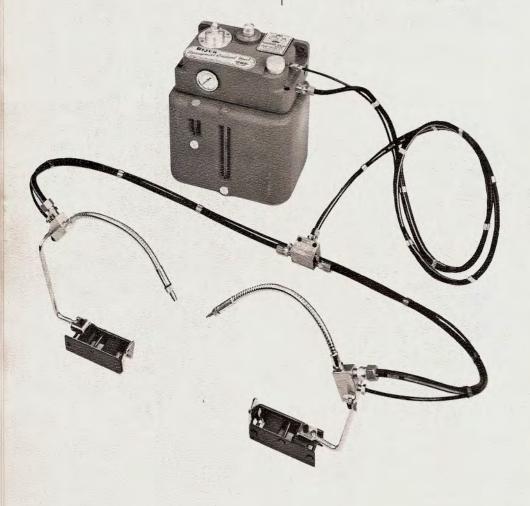
A variety of systems are available to meet production needs. Installation is simple and quick.

Mist coolant

These units serve all Series I and II machines and the Grinder. They consist of a coolant tank, pump-motor and a combination of nozzles which provide a pressurized spray of coolant precisely where required for effective heat dissipation. All units are machine mounted.

Two sizes of mist tanks are available, 1 gallon (2560067) and 5 gallon (2560068). These are both 115 volt, single phase and can be either 50 or 60 hertz. The nozzle assembly is ordered separately by the number required.

No. Nozzles	Code #
1	2560076
2	2560077
3	2560078
4	2560007
6	2560008
8	2560009



Flood coolant

There are two types of flood coolant tanks, floor mounted and column mounted. Each can be ordered in 50 or 60 Hz.

Floor Tank Code # 115V Single Phase 60 Hz — 2560065

Column Tank

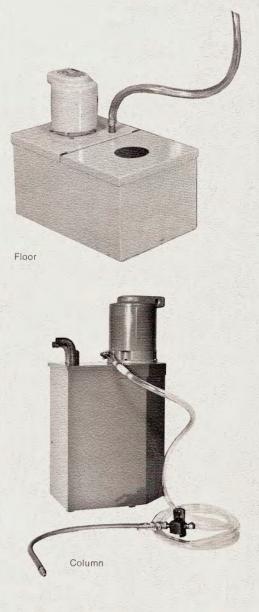
115V Single Phase 60 Hz — 2560066 Floor Tank

115V Single Phase 50 Hz — 2560079 Column Tank

115V Single Phase 50 Hz — 2560080

The nozzle assemblies are ordered separately by the number of nozzles required and the number of nozzles per head.

No. Heads	Nozz/Head	Code #
1	1	2560069
2	1	2560070
3	1	2560071
4	1	2560072
1	2	2560073
2	2	2560074



Electrical controls

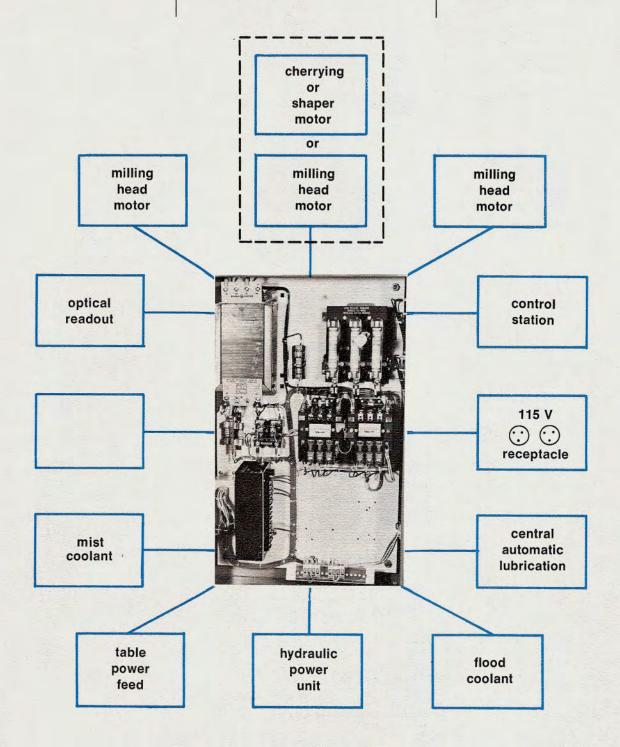
Bridgeport offers an integral, complete electrical distribution system for column mounting.

Features:

- Designed for special applications.
- Designed for new machines and field retrofitting. For retrofitting please check your dealer for exact model.
- All components are mounted in a special NEMA 12 enclosure.
- Operators' controls operate on 110 Volt

AC and are located in a conveniently placed push button station.

- Units are available in most voltages and frequencies.
- System includes, as standard, a fusable disconnect switch — when enclosure door is opened all power is cut off.

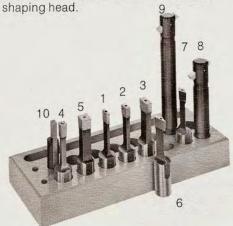


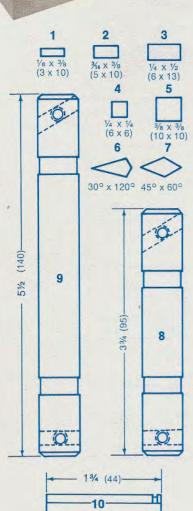
Tooling and tooling aids

Maximum efficiency of any machine tool often is determined by the proper tooling. Bridgeport Machines has developed a full line of quality tools and tooling aids. Although developed primarily for the Bridgeport, many of these can be used with other milling machines.

Shaping tool set - Code #2240094

Convenient package consists of seven shaped tools and three standard tool bit holders for use with the Model E vertical shaping head.

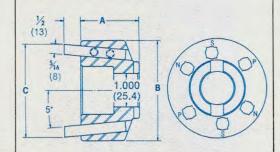




Fly cutters

Produce a gleaming surface finish in a quick pass. Accommodate %" (8mm) square tool bits, singly or in pairs, when used with a No. 3 shell mill holder (see page 16). Tool bits may be set at 5 degrees positive rake, 5 degrees negative rake, or at zero rake. Bits are inserted in diametrically opposed broached holes.





Specifications	FC3		FC4	
Code #	2310000		2310002	
A	13/4	(44)	13/4	(44)
В	3	(76)	4"	(102)
C	23/4	(70)	33/4	(95)
Without Shank	2310	001	2310	003

Quick change tooling

Bridgeport offers a complete line of quick change tooling for both Series I and Series II machines. Designed to permit fast tooling changes during production to speed operations, quick change tooling is available with #30 taper holders for Series I machines and #40 taper holders for Series II machines.

As available, collets marked in both inch and metric sizes.

Quick change tooling for both Series I and Series II machines includes:

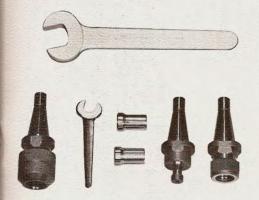
- Bridgeport quick change spindle
- Drill & end mill chucks
- Drill extension chucks
- Non-pullout end mill collets
- Floating reamer holders
- · Tenthset boring heads
- Tenthset boring bars
- Morse taper adapters
- Jacobs taper adapters
- Shell mill adapters
- End mill adapters
- Tap holders
- Preset fixture

In addition, Series II also offers:

- · Spade blade holders
- Spade blades

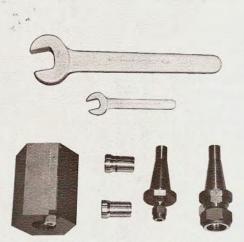


Bridgeport recommended quick change tooling packages



Series I w/J and 2J head-Code # 1570003

- 2 collet chucks
- 14 collets ranging in size from 1/8" to 3/4" (3mm to 19mm)
- 1 tool extension chuck
- 4 non-pullout end mill collets 3/8" (10mm), 1/2" (13mm), 5/8" (16mm), 3/4" (19mm)
- 1 1" (25mm) end mill adapter
- 1 1/2" (13mm) pilot shell mill adapter



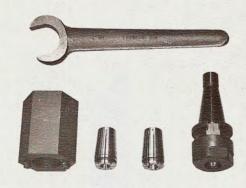
Series I (#30 taper) - Code #1570550

- 6 drill & end mill chucks, range 1/4" to 3/4" (6mm to 19mm)
- 14 collets ranging in size from 1/4 " to 3/4" (6mm to 19mm)
- 4 non-pullout end mill collets 3/8" (10mm), 1/2" (13mm), 5/8" (16mm), 3/4" (19mm)
- 2 drill chucks ranging from 1/8" to 1/4" (3mm to 6mm)
- 5 collets ranging in size from 1/8" to 1/4" (3mm to 6mm)
- 2 open end wrenches 11/6" (17mm) and 11/2" (38mm)
- 1 locking fixture for chucks



Series II w/4J head-Code #1572003

- 4 drill and end mill chucks
- 11 collets ranging in size from \%" to 1" (10mm to 25mm)
- 5 non-pullout end mill collets 3/8" (10mm), 1/2" (13mm), 5/8" (16mm), 3/4" (19mm), 1" (25mm)
- 1 11/4" (32mm) end mill adapter
- 2 drill extension chucks
- 9 collets ranging in size from 1/8" to 3/8" (3mm to 10mm)
- 1 locking fixture



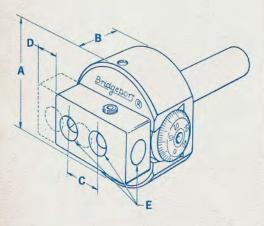
Series II (#40 taper) - Code #1572500

- 9 drill and end mill chucks, range %" to 1" (5mm to 25mm)
- 13 collets ranging in size from \%" to 1" (5mm to 25mm)
- 4 non-pullout end mill collets %" (10mm), ½" (13mm), 5%" (16mm), 34" (19mm)
- 1 open end wrench 21/4" (57mm) hex
- 1 locking fixture

Boring heads

Two models of boring heads, for use with M, J, 2J, and 4J heads, convert a Bridgeport milling machine into an accurate boring machine. Models are available reading in thousandths of an inch or hundredths of a mm. All heads are supplied with the necessary wrenches, mounting block and container.





Specifications	No. 1	No. 2	
A	21/4 (57)	33/8 (86)	
В	11/4 (32)	13/4 (44)	
С	3/4 (19)	1% (30)	
D adjustment	3/8 (10)	1/2 (13)	
E tool size	3/8 (10)	5/8 (16)	

Inch Code #	Metric Code #
2350000	2350042
2350137	
2355033	
2350009	2350040
2350138	
2350032	
	Code # 2350000 2350137 2355033 2350009 2350138

Boring head tools and shanks

Head No. 1 accommodates 3/8 (10mm) diameter boring tools and Head No. 2 accepts 5/8" (16mm) tools. Boring head shanks, designed specifically for use with your Bridgeport, are available for both the No. 1 and No. 2 heads. When ordering, please specify the model you require.

Complete set of tools for #1 Boring Head-Code #2350001

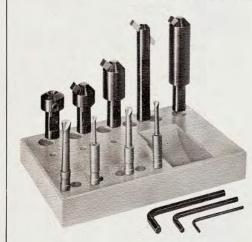
Complete set of tools for #2 Boring Head-Code #2350010

#1 Boring Head R8 Shank -

Code #2350060

#2 Boring Head R8 Shank -

Code #2350067



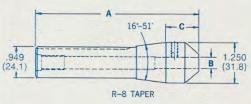


End mill holders

Allow the use of larger shank cutters for greater tool reach. Holders are made with R-8 taper, for use with Model 2J and J

End mill holders for the 4J head are listed under quick change tooling on page 12.





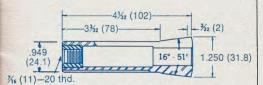
Specificat	ions EH-3	EH-6	EH-8
Code #	2360002	2360005	2360006
A	5% (132)	5 (127)	5% (148)
В	3/6 (5)	3/8 (10)	1/2 (13)
C	15/32 (29)	31/32 (25)	15/32 (29)

Specifications	EH-10	EH-12
Code #	2360007	2360008
A	5% (141)	611/16 (170)
В	5/8 (16)	3/4 (19)
С	111/32 (39)	221/32 (67)

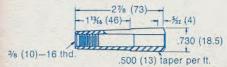
EH-14	EH-16	
2360009	2360010	
621/32 (169)	615/6 (176)	
7/8 (22)	1 (25)	
25/8 (67)	22% (74)	
	2360009 6 ² ½ (169) ⁷ / ₈ (22)	

Collets

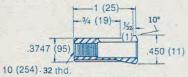




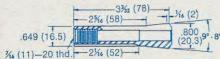
R-8 Collet—Code #2490000-50 For use with Model J and 2J heads, No. 3 Right-Angle Attachment. Holds tools from 1/8" through 3/4" (3mm through 19mm) in 1/4" (.4mm) steps.



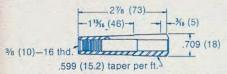
NO. 7 B&S Collet—Code #2491001-29 For use with Model M and T heads. Holds tools from 1/4" (2mm through 13mm) in 1/4" (.4mm) steps.



N-2 Collet—Code #2497001-29 For use with Bridgeport No. 2 and No. 4 Right-Angle Attachments. Holds tools from 1/4" (2mm through 6mm) in 1/2" (.8mm) steps.



B-3 Collet—Code #2493001-29 For use with Model T head. Holds tools from ½" through ½" (2mm through 13mm) in ¼" (.4mm) steps.

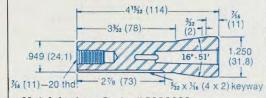


NO. 2 Morse Collet—Code #2492001-29 For use with Model M and T heads. Holds tools from $\frac{1}{6}$ " through $\frac{1}{4}$ " (2mm through 6mm) in $\frac{1}{6}$ " (.4mm) steps.

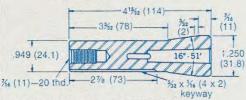
Adapters

For use with tapered shank end mills and





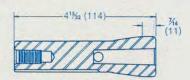
M-1 Adapter—Code #2330023 R-8 taper, for use with Model J and 2J heads, No. 3 Right-Angle Attachment. Takes No. 1 Morse Taper.



M-2 Adapter—Code #2330024 R-8 taper, for use with Model J and 2J heads, No. 3 Right-Angle Attachment. Takes No. 2 Morse Taper.



BS-5 Adapter—Code #2330027 R-8 taper, for use with Model J and 2J heads, No. 3 Right-Angle Attachment. Takes No. 5 B&S Taper.



BS-7 Adapter—Code #2330028 R-8 Taper, for use with Model J and 2J heads, No. 3 Right-Angle Attachment. Takes No. 7 B&S Taper.

Chucks

Plain bearing chuck Used throughout the world on standard drilling equipment.



Model No.	Code #	Capacity in.	Taper mount	
32	1402924	0 -3/8 (0-10)	#2 JT	K32
36	1402927	3/6 -3/4 (5-19)	#3 JT	K4

Ball bearing chuck Designed for heavy duty drilling and

duty drilling and features extremely good accuracy.



Model No.	Code #	Capacity in.	Taper mount	Uses key
11N	1402919	0 -3/8 (0-10)	#2JT	K32
14N	1402920	0 -1/2 (0-13)	#3 JT	КЗ
16N	1402921	1/8 -5/8 (3-16)	#3 JT	K4
18N	1402922	½ -3/4 (3-19)	#4 JT	K4
20N	1402923	³ / ₈ -1 (10-25)	#5 JT	K5

Keyless chuck

Offers excellent gripping power and extremely high accuracy.



Model No.	Code #	Capacity	Taper mount
65 J1	1402903	0 -1/4 (0-6)	#2 JT
130 J6	1402906	1/32 -1/2 (1-13)	#6 JT
160 J6	1402907	½ -5/8 (3-16)	#6 JT

Shell mill holders

Extend tooling capability to shell end mills for face and side milling in one operation. No. 3 holder may also be used with flycutters (see page 12). Holder is furnished with R-8 taper for use with Bridgeport Model 2J and Model J heads; wrench furnished.

Shell mill holders for the 4J head are listed under quick change tooling on page 12.



Pilot diameter .500" (12.7mm)— Code #2300000 Pilot diameter .750" (19.1mm)— Code #2300001 Pilot diameter 1.000"(25.4mm)— Code #2300002

Arbor screw



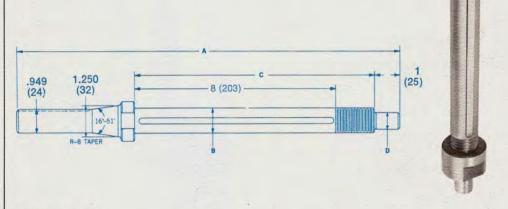
End mill wrench



	Code #
Arbor screw for .500" pilot	2300009
Arbor screw for .750" pilot	2300010
Arbor screw for 1.000" pilot	2300011
Wrench for .500 pilot	2300006
Wrench for .750 pilot	2300007
Wrench for 1.000 pilot	2300008

Arbors

Permits use of Model 2J or Model J head in a vertical position for cutting slots or side milling. Arbors allow use of slitting saws, side mills or alternate tooth milling cutters. On gang jobs it is suggested that the Bridgeport-designed arbor support be used to obtain maximum rigidity. Arbors are heat treated and ground. Spacers are ground parallel and square with the bore of the spacer. All arbors are provided with wrench flats on the shoulders to facilitate mounting or removal of arbor nut.



Specifications

	Code #	Thread direction	Α	В	С	D
SAR-12-P	2470083	Right	142%2 (379)	3/4 (19)	9% (236)	1/2 (13)
SAL-12-P	2470084	Left	142% (379)	3/4 (19)	9%2 (236)	1/2 (13)
SAR-14-P	2470085	Right	151/2 (382)	7/8 (22)	913/2 (239)	11/16 (17)
SAL-14-P	2470086	Left	151/32 (382)	7/8 (22)	913/2 (239)	11/16 (17)
SAR-16-P	2470087	Right	151/32 (387)	1 (25)	917/32 (242)	11/16 (17)
SAL-16-P	2470088	Left	151/32 (387)	1 (25)	911/32 (242)	11/16 (17)
SAR-20-P	2470089	Right	1515/2 (393)	11/4 (32)	921/32 (245)	11/16 (17)
SAL-20-P	2470090	Left	1515/32 (393)	11/4 (32)	921/32 (245)	11/16 (17)



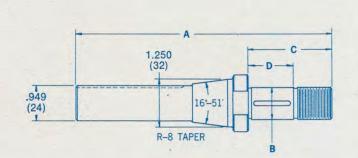
Spacers for use with Bridgeport Arbors

	Code #	I.D.	Length
SA-124	2470067	3/4 (19)	2 (51)
SA-122	2470053	3/4 (19)	5/8 (16)
SA-123	2470054	3/4 (19)	5/6 (8)
SA-144	2470068	7/8 (22)	2 (51)
SA-142	2470055	7/8 (22)	5/8 (16)
SA-143	2470056	7/8 (22)	% (8)
SA-164	2470069	1 (25)	2 (51)
SA-162	2470057	1 (25)	3/4 (19)
SA-163	2470058	1 (25)	5/16 (8)
SA-204	2470070	11/4 (32)	2 (51)
SA-202	2470059	11/4 (32)	3/4 (19)
SA-203	2470060	11/4 (32)	3/8 (10)

All dimensions in inches (metrics in parenthesis)

Stub arbors





Specifications

	Code #	Thread direction	A	В	С	D
SAR-8	2470071	Right	6 (152)	1/2 (13)	13/8 (35)	²³ / ₃₂ (18)
SAL-8	2470072	Left	6 (152)	1/2 (13)	13/8 (35)	²³ / ₃₂ (18)
SAR-10	2470073	Right	65% (160)	5/8 (16)	13/4 (44)	31/32 (25)
SAL-10	2470074	Left	65/6 (160)	5/8 (16)	13/4 (44)	31/32 (25)
SAR-12	2470075	Right	63/4 (172)	3/4 (19)	21/8 (54)	11/32 (31)
SAL-12	2470076	Left	63/4 (172)	3/4 (19)	21/8 (54)	11/32 (31)
SAR-14	2470077	Right	6% (175)	7/8 (22)	21/4 (57)	17/32 (31)
SAL-14	2470078	Left	6% (175)	7/8 (22)	21/4 (57)	13/2 (31)
SAR-16	2470079	Right	7% (183)	1 (25)	21/2 (64)	111/32 (34)
SAL-16	2470080	Left	7% (183)	1 (25)	21/2 (64)	111/32 (34)
SAR-20	2470081	Right	7% (192)	11/4 (32)	23/4 (70)	115/32 (37)
SAL-20	2470082	Left	7% (192)	11/4 (32)	23/4 (70)	115/32 (37)



Spacers for use with Bridgeport Stub Arbors.

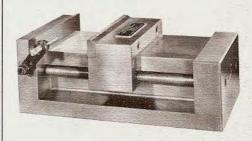
	Code #	I.D.	Length
SA-82	2470049	1/2 (13)	3/8 (10)
SA-83	2470050	1/2 (13)	3/6 (5)
SA-102	2470051	5/8 (16)	1/2 (13)
SA-103	2470052	5/8 (16)	1/4 (6)
SA-124	2470067	3/4 (19)	2 (51)
SA-122	2470053	3/4 (19)	5/8 (16)
SA-123	2470054	3/4 (19)	5/6 (8)
SA-144	2470068	7/8 (22)	2 (51)
SA-142	2470055	7/8 (22)	5/8 (16)
SA-143	2470056	7/8 (22)	5/6 (8)
SA-164	2470069	1 (25)	2 (51)
SA-162	2470057	1 (25)	3/4 (19)
SA-163	2470058	1 (25)	5/6 (8)
SA-204	2470070	11/4 (32)	2 (51)
SA-202	2470059	11/4 (32)	3/4 (19)
SA-203	2470060	11/4 (32)	3/8 (10)

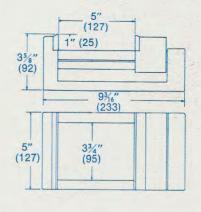
Work holding and positioning aids

Positioning and holding the workpiece the right way is frequently the difference between profitable machining and scrap. Table attachments have been developed for use with the Bridgeport Series I and Series II to help you position and hold workpieces accurately.

5" (127mm) multi-purpose vise — Code #1533507

This versatile vise packs tremendous capacity into a small, lightweight package. Revolutionary twin lead screw design provides full 5" (127mm) capacity, with positive and even holding power across entire face of the jaws. Vise is flat and parallel within .0003" (.0076mm), and square on all sides within .0001" per inch (.001mm per 10mm) and square within its jaws. Vise is also provided with squaring bracket (not shown in photograph). These features make the grinding of compound angles or squaring third and fourth sides of a part simple and quick operations. Squareness of vise also permits it to be removed, with part in place, for inspection and then remounted accurately for additional machining. A stop is provided for repetitive machining.





Plain and swivel vises

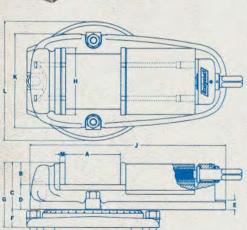
Plain - Code #2530003 Swivel - Code #2530001

Built rigidly and accurately of gray iron, with jaws of heat treated alloy steel ground to a precision fit. A large coolant trough is an integral part of the base. Alloy steel lead screw and a bronze lead screw nut, with provisions for lubrication, are standard on all Bridgeport plain and swivel vises.

The swivel model permits quick setup for angular milling and diagonal cutting. It can be rotated a full 360 degrees. The swivel base is graduated in degrees around its periphery in 10 minute increments.

The plain model (without base) has opposed keyways in its base which permits positive mounting on the table of the miller with jaws either parallel or at right angles to the table of the machine.





Specifications	Inch	Metric	
A Jaws Open	5	(127)	
В	2	(51)	
С	41/4	(108)	
D	21/4	(57)	
E	7/8	(22)	
F*	15/8	(41)	
G*	57/8	(149)	
Н	61/8	(156)	
J	175/8	(448)	
K	81/2	(216)	
L*	1011/6	(271)	
М	1/2	(13)	

^{*}Swivel model only.

Combination sine tables 5" (127mm) or 10" (254mm)

These tables permit rapid setting of compound angles and allow for fast proofing of work. Once mounted, the workpiece and sine table may be considered integral and moved as a unit through other operations, inspection, or to other locations.

By tightening two screws through the base, the table becomes a solid angleplate with sine bar which may be detached or moved to the horizontal surface for plain angle or compound angle setups.

The tables are guaranteed to be flat and square within .001" (.025mm) and parallel within .002" (.05mm). Rigidly constructed with T-slots for ½" (13mm) T-bolts or T-nuts, adjustable side supports, and hinge bolts for tightening to assure stability.



Specifications	5" (127mm)	10" (254mm)
Code #	1445341	1445343
Horizontal working surface	5x7 (127x178)	10x12 (254x305)
Vertical working surface	3½x7 (89x178)	6x12 (152x305)

Plain sine tables 5" (127mm) or 10" (254mm)

Plain angles are set quickly and accurately with either of these tables. They permit moving a complete setup to inspection or for secondary operations on another machine and back to the Bridgeport without removing the workpiece.

Both tables are guaranteed to be flat and square within .001" (.025mm) and parallel within .002" (.05mm). Sine tables are rigidly constructed with T-slots for ½" (13mm) T-bolts or T-nuts, adjustable side supports, and hinge bolts for tightening to assure stability.

Example. To set an $11\frac{1}{2}$ ° angle with the 10'' (254mm) sine table, first find the sine of an $11\frac{1}{2}$ ° angle which is .19937. Multiply .19937 by 10. The result is 1.9937. Use a gage block of 1.9937 and place under sine bar of table. This gives a correct setting of $11\frac{1}{2}$ °. (For the 5'' table (127mm), multiply the sine figure by 5.)

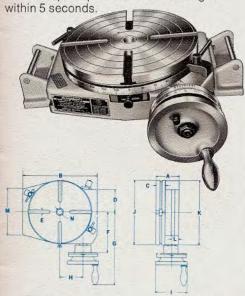


Specifications	5" (127mm)	10" (254mm)
Code #	1445340	1445342
Working surface	6%x7 (162x178)	11½x12 (292x305)

Rotary table

Permits turning workpiece in the horizontal position precisely through degrees, minutes and seconds by means of manual control and computation.

Three optional rotary table accessories have been developed to provide greater flexibility and ease of operation. Dividing attachment consists of a furnished chart and indexing device which allow rapid and accurate computation of indexing for degrees and minutes of workpiece rotation. The right angle plate allows you to work in the vertical position. The tailstock supports long workpieces between centers for greater accuracy. Tables are of minimum heights - 41/2" (114mm) - to permit maximum daylight. They are available in 12" (305mm) and 15" (381mm) diameter models. Accuracy is within 30 seconds of arc through a complete rotation of the table which is graduated by degrees. An adjustable dial on the hand wheel reads directly to each minute. A Vernier plate permits direct reading to



RT	-12	RT	-15
252	0001	252	0002
41/4	(108)	41/4	(108)
14	(356)	17	(432)
13/4	(44)	1 3/4	(44)
41/4	(108)	53/4	(146)
5/8	(16)	5/8	(16)
7%6	(192)	91/16	(230)
1311/16	(348)	141/6	(357)
43/8	(111)	43/8	(111)
57/8	(149)	57/8	(149)
12	(305)	15	(381)
117/8	(302)	147/8	(378)
11/4	(32)	11/4	(32)
83/4	(222)	10	(254)
1	(25)	1	(25)
	252 41/4 14 13/4 41/4 5/8 7%6 131/6 43/8 57/8 12 111/8 11/4 83/4	RT-12 2520001 4 ¹ / ₄ (108) 14 (356) 1 ³ / ₄ (44) 4 ¹ / ₄ (108) ⁵ / ₈ (16) 7 ³ / ₆ (192) 13 ¹ / ₆ (348) 4 ³ / ₈ (111) 5 ⁷ / ₈ (149) 12 (305) 11 ⁷ / ₈ (302) 1 ¹ / ₄ (32) 8 ³ / ₄ (222) 1 (25)	2520001 252 4¼ (108) 4¼ 14 (356) 17 1¾ (44) 1¾ 4¼ (108) 5¾ 5% (16) 5% 7% (192) 9% 13¼ (348) 14¼ 4¾ (111) 4¾ 5% (149) 5% 12 (305) 15 11⅓ (302) 14⅓ 1¼ (32) 1¼ 8¾ (222) 10

All dimensions in inches (metrics in parenthesis)

Attachments for rotary tables



Right angle bracket for 12" (305mm) table — Code #2520066 Right angle bracket for 15" (381mm) table — Code #2520101



Tail stock with center for 12" (305mm) table

— Code #2520003

Tail stock with center for 15" (381mm) table

— Code #2520004



#1 plate for indexing attachment 159 holes —Code #2520551

#2 plate for indexing attachment 166 holes

- Code #2520552

#3 plate for indexing attachment 186 holes - Code #2520553

#4 plate for indexing attachment 201 holes — Code #2520554

#5 plate for indexing attachment 383 holes — Code #2520555

#6 plate for indexing attachment 403 holes
— Code #2520556

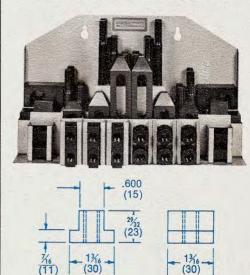
Indexing attachment (no plates)

- Code #2520006

Hold down nut and bolt set

The quick, sure, convenient way to hold down work. This handy set is complete for holding all standard workpieces and comes in a sturdy container with notched holes to allow mounting on or near your Bridgeport. Same set fits Series I and Series II tables.

Two sets are available; Set A — Code #1511820 with step clamps and step blocks is illustrated. Set B — Code # 2510000.



Set A mount	Set B amount	part'	thread	le	ngth
4	4	Stud	1/2 (13)-13	3	(76)
4	4	Stud	1/2 (13)-13	4	(102)
4	4	Stud	1/2 (13)-13	5	(127)
4	4	Stud	1/2 (13)-13	6	(152)
4	4	Stud	1/2 (13)-13	7	(178)
4	4	Stud	1/2 (13)-13	8	(203)
6	4	Flange nut	1/2 (13)-13		
4	4	Nut couplers	1/2 (13)-13		
6	4	"T" slot nut	1 (25) -13	13/16	(30)
1	1	Holder			
	4	Strap clamp	size 3/4×11/2 (19×38)	6	(152)
1 PR		Step clamp	½ x 1/8 (13x3)	21/2	(64)
1 PR		Step clamp	³ / ₄ ×1 ¹ / ₄ (19×32)	4	(102)
1 PR		Step clamp	√8 x 1 √4 (22 x 32)	6	(152)
2 PR		Step block	³ / ₄ x 1 ½ (19 x 38)		
2 PR		Step block	1½x2½ (29x64)		
2 PR		Step block	2½x6 (64x152)		

Spare parts kits Milling Heads

The following kits consist of running parts which normally receive wear during the normal operation of our milling heads. Included are drive belts, brake shoes, counterbalance springs, spindle bearings and other basically useful items for:

M heads - Code #2203000

J heads, 1 HP - Code #2193000

J heads, 11/2 HP - Code #2183000

2J heads, 2 HP - Code #2553000

4J heads - Code #2171000

Series I Machines

Kit consists of way wipers, cross and longitudinal leadscrew nuts. Nuts - Code # 2062000

Series II Machines

Kit consists of way wipers -Code #2151000

Metric conversion kits Milling Heads

Kit includes:

- (1) Millimeter quill stop scale
- (1) Millimeter quill stop nut
- (1) Millimeter quill stop screw

(1) Locking nut

for M heads - Code #2204000

for J heads - Code #2184000

for 2J heads — Code #2184000 for 4J heads — Code #2173000

Machine Basics

Kits consisting of: Leadscrews, nuts and dials are available for most Bridgeports. The following kits cover most

machine production.

Series I Machines

36" (914mm) manual feed table-Code #2064001

42" (1067mm) manual feed table-Code #2064002

48" (1219mm) manual feed table-Code # 2064003

36" (914mm) power feed equipment-Code # 2064004

42" (1067mm) power feed equipment-Code #2064005

48" (1219mm) power feed equipment-Code #2064006

Series II Machines

For manual and power feed machines-Code #2153000



Digital readout

The Bridgeport position readout system is a versatile 2 axis (X and Y) design with ± .0005" (.01mm) resolution. It consists of two transducer assemblies, one each for the longitudinal axis and the cross axis. and a dual readout panel with a digital display for each axis. The system reads in metrics and can be changed from metric to inches without loss of information.

Each transducer assembly contains a precision scale, a lifetime solid state light source, and solid state solar cell sensors. These are all contained in a rugged sealed housing which is simple to install, and very tolerant of machine variations and machine wear. A barrier seal effectively protects against cast iron dust as well as liquid splatter or oil mist.

The control unit mounts on the column and contains the operator's keyboard and a separate display for each axis. The axis display shows the directional sign (+ or -), a decimal point and 6 digits. The gas discharge displays are the continuous segment type and are amber in color for ease of reading and wide angle viewing.

	Code #
Series I, 42" Trans.	2812200
Series I, 48" Trans.	2812201
Ser I, 42" Power feed	2812202
Ser I, 48" Power feed	2812203
Series II	2812204



Duplicator Accessories

Power table feed and pick feed assembly for 1D manual die sinking machine

This combination provides an automated program which institutes machine feed along the table (x axis) until table limit micro-switch actuates hydraulic cross feed (y axis). Upon completion of cross pick x axis movement is started.

Retrofit device provides a similar program to that offered by Synchro-Trace units for a small dollar investment. More productivity with less help — machine can operate unattended for hours.



Table	Inch	Metric
42" (1067mm)	Code #2420024	Code #2420025
48" (1219mm)	Code #2420026	Code #2420027

Vertical pick feed - Code #2983787

A down-feed "pick" control is an ideal addition to 3D tracing systems which can be factory installed or retrofitted.

Positive pick from .001" (.025mm) to 1" (25mm) on inch machines and .02mm to 25mm on metric machines, with push button control for ease of use for the operator. It improves the tracer finish on dies, molds and contoured parts.



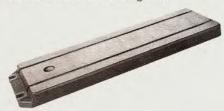
Tracing stylus sets for hydraulic duplicators



Square end — .375" (9.5mm) Shank [30 stylii from .125" (3.2mm) to 1.062" (27.0mm) diameter] — Code # 2988176 Ball end — 0.375" (9.5mm) Shank [30 stylii from .125" (3.2mm) to 1.062" (27.0mm) diameter] — Code # 2988175

Template tables

Extension tables to be mounted on machine work table to support lightweight templates. Extension makes more of machine table available for mounting multiple pieces or large work pieces. Necessary for duplicators with more than one cutting head.



Series I template table 9"x30" (229mmx762mm) — Code #2120001 Series II template table 12"x35" (305mmx889mm) — Code #2115036

Scribe-Master - Code #1115313

A mechanical device which attaches to the quill of any Bridgeport machine, the Scribe-Master produces drawings accurate within .001" (.03mm) for use with a Line-A-Mill or other optical tracing machines.

The Scribe-Master, calibrated in degrees and minutes to allow reproduction of any angle, allows reproduction of the most complex mechanical drawings.

The layout man reduces the drawing to its basic elements, determines the sequence of lines and radii, and draws them with the Scribe-Master on the Scribe-Plex plates (specially developed for the Scribe-Master). Furnished with .012" (.30mm) and .017" (.43mm) points as well as with a special sharp point for laying out metal templates. Scribe-Plex sheets are available in sizes 8"x10" (203mmx254mm) and 12"x18" (305mmx457mm). Touch-up kits, for correcting errors on Scribe-Plex sheets, also are available through Bridgeport dealers.



Grinder Accessories

Accessories can make the Bridgeport a more versatile unit for handling a variety of grinding jobs and keep it producing.

Metric leadscrews and dials

Metric conversion kits consisting of leadscrews, nuts and dials can convert the grinder from inch to metric positioning in a matter of hours.

Electrical controls

Electrical controls meeting NFPA 79 "Electrical Standards for Metalworking Machine Tools 1974" are available as integral units for the control of the grinder spindle motor, dust collector, coolant systems or various combinations of these accessories.

Coolant systems

Flood — Code #2560075 Mist—See page 10

The coolant system is offered in either spray or mist. The installation is simple and quick. A splash pan is included with the flood coolant.





Dust collector — Code # 2710195 This dust collector can be installed in minutes. For the tool room this item is a must. Reduces fine dust particles to a minimum.

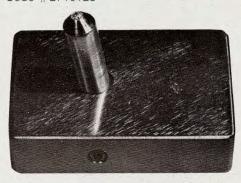


Magnetic chucks

6"x12" (152mmx305mm)—Code #1713514 8"x15" (203mmx381mm)—Code #1713510 Size the chucks to suit your work. We offer several permanent magnet chuck sizes. Our chucks are manufactured to rigid specifications.



Grinding wheel dresser— Code #2710123



Wheel adapters

7" (178mm) — Code #1713511 12" (305mm) — Code #2710026





Training Aids

Bridgeport Machines has developed training aids which are available to our customers. Your Bridgeport dealer can assist you in your training requirements.

Schools and seminars

These special education sessions are available to Bridgeport customers under certain conditions. Your Bridgeport dealer can give you details.

Classroom aids

Developed for school use, these are made available through Bridgeport dealers.

Maintenance training

Regularly scheduled courses in the operation and maintenance of Bridgeport machines are given in Bridgeport's special training facilities. Courses available include detailed "how-to" sessions with expert Bridgeport instructors. NC courses include training in programming, and NC machine maintenance.

Videotapes

Produced by Bridgeport to explain machines, accessories and attachments, and special techniques. These tapes are available for viewing through your Bridgeport dealer.

Manuals and Bulletins

Operator's manuals

Operator's manuals are available for Bridgeport machines. These are normally supplied at the time of machine delivery. Should you require an extra manual, they may be purchased from your Bridgeport dealer.

Code #1040001 (M-105) Series I Operation and Maintenance Code #1040003 (M-114) Line-A-Mill Operation and Maintenance Code #1040005 (M-112) 180 Duplicator Operation and Maintenance Code #1040006 (M-101) Series II Operation and Maintenance Code #1040022 (M-113) Grinder Operation and Maintenance Code #1040025 (360/30) Electro Profile Technical Manual Code #1040052 (M-306) Pivot Type Attachments Code #1040053 (D-520) Con-trol-path Operators Manual Code #1040054 (D-550) Synchro-Trace Operation and Maintenance Code #1040068 (M-107) Series II Synchro — Trace 0&M Manual

Operator's manuals are also available for

all numerical control products.

Sales and Service

Sales and service network

Bridgeport's extensive network of dealers maintain a stock of spare parts for the convenience of Bridgeport users.
Bridgeport dealer sales and service personnel are factory trained and welcome the opportunity to be of service to you and your company for all your Bridgeport requirements.

Behind every dealer is Bridgeport's factory stock of spare parts, and experienced engineers and service personnel to fully support the dealer's local service to you. With this combination of dealer/manufacturer support and broad product line, you can be confident in your selection of the best Bridgeport product for your specific requirement; and of getting the fullest use of your Bridgeport machines and accessories. Dealers are located in every industrial area so that Bridgeport customers are assured of prompt service.

Bridgeport Dealers

Alabama Modern Machinery Associates 1824 29th Ave. South Birmingham 35209 205-870-8946

Alaska Star Machinery Company E. 328 Sprague Ave. Spokane, Wash. 99202 509-747-6121

Arizona

Machinery Sales Company 2941 E. Washington St. Phoenix 85034 602-273-1245

Arkansas MARSUCO 4801 So. Wheeler Fort Smith 72901 501-646-1691 MARSUCO 6201 Murray St. Little Rock 72209 501-565-0931

California — Northern BHS Machinery Company 717 Airport Blvd. So. San Francisco 94083 415-761-0130

California — Southern Machinery Sales Company 2838 Leonis Blvd. Los Angeles 90058 213-588-8111

Colorado Richard Ives Company 1220 South Lipan St. Denver 80223 303-744-1205

Connecticut Gilbert & Richards, Inc. 70 State St. North Haven 06473

203-239-4646 Delaware Lemuel R. Lance, Inc. Philadelphia Industrial Park 10400 Drummond Rd. Philadelphia, PA 19154 215-824-3400

215-824-3400
Florida
R. O. Deaderick Company, Inc.
4066 N.E. 5th Ave.
Ft. Lauderdale 33334
305-565-9329
Florida — Western
Modern Machinery Associates
1824 29th Ave. South
Birmingham, Ala. 35209
205-870-8946
Georgia

Georgia R. O. Deaderick Company, Inc. 1455 Tullie Circle N.E. Atlanta 30329 404-634-4288

Hawaii C & F Machinery Corp. 656 Queen St. Honolulu 96813 808-524-1033

Idaho Idaho
Richard Ives Company
1220 South Lipan St.
Denver, Col. 80223
303-744-1205
Illinois — Northern
Don G. Beck Company
6039 South Oak Park Ave.
Chicago 60638

Chicago 60638 312-586-7500 Don G. Beck Company 3248 Forest View Road Rockford 61109 815-226-8338

Illinois — Southern Hartwig, Inc. 1452 Warson Road N. St. Louis, Mo. 63132 314-426-5300

Indiana
W. W. Siegrist Machinery
Company, Inc.
1139 Shelby St.
Indianapolis 46203
317-632-3468

Indiana — Northern
Don G. Beck Company
6039 South Oak Park Ave.
Chicago, Illinois 60638
312-586-7500

The Satterlee Co. 280 Prospect Pl., S.W. Cedar Rapids 52404 319-366-7778

Iowa — Western Ernst-Eichman Machinery Corp. 1900 S. West St. Wichita, Kansas 67213 316-943-0278

Kansas Ernst-Eichman Machinery Corp. 1900 S. West St. Wichita 67213 316-943-0278

Kentucky C. H. Gosiger Machinery Company 1850 Production Drive Louisville 40299 502-491-2095

Couisiana
Oliver H. Van Horn Company, Inc.
6301 Choctaw Drive
Baton Rouge 70815
504-356-1357

Oliver H. Van Horn Company, Inc. 4100 Euphrosine St. New Orleans 70150 504-821-4100

Oliver H. Van Horn Company, Inc. 302 Montgomery St. Shreveport 71107 318-222-2173

Maine The Robert E. Morris Company 160 Wells St. Newton Centre, Mass. 02159 617-964-1500

Maryland Krize Machine Tool Company, Inc. P.O. Box 5761, Milford Ind'l Rd. Baltimore 21208 301-484-4222

Massachusetts — Eastern
The Robert E. Morris Company
160 Wells St.
Newton Centre 02159
617-964-1500

Massachusetts — Western Gilbert & Richards, Inc. 70 State St. North Haven, CT 06473 203-239-4646

Michigan National Sales Engineering Corp. 35455 Schoolcraft Rd. Livonia 48150 313-427-9000

Minnesota The Satterlee Company 2200 F. Franklin Ave. Minneapolis 55404 612-370-2511 The Satterlee Company

2020 West 1st St. Duluth 55806 218-727-8454 Mississippi

Oliver H. Van Horn Company, Inc. 451 No. Gallatin St. Jackson 39203 601-354-4321

Missouri — Eastern Hartwig, Inc. 1452 Warson Road N. St. Louis, Mo. 63132 314-426-5300

Missouri — Western Ernst-Eichman Machinery Corp. 1701 Locust St. Kansas City 64108 816-842-1336

Montana Richard Ives Company 533 South 300 West Salt Lake City, Utah 84101 801-328-3181

Nebraska Ernst-Eichman Machinery Corp. 8909 "H" St. Omaha 68127 402-339-3930

Nevada — Northern BHS Machinery Company 717 Airport Blvd. So. San Francisco, CA 94083 415-761-0130

Nevada — Southern Machinery Sales Company 2838 Leonis Blvd. Los Angeles, Cal. 90058 213-588-8111

New Hampshire
The Robert E. Morris Company
160 Wells St.
Newton Centre, Mass. 02159
617-964-1500

New Jersey — Northern The Wallace Machine Tool Company, Inc. 600 Hollister Rd. Teterboro 07608 201-288-2400

New Jersey — Southern Lemuel R. Lance, Inc. Philadelphia Industrial Park 10400 Drummond Rd. Philadelphia, PA 19154 215-824-3400

New Mexico Gray Machinery Division Equipment Sales & Manufacturing Company 1010 4th St. N.W. Albuquerque 87125 505-247-3781

New York —
Southern & Long Island
The Wallace Machine Tool
Company, Inc.
600 Hollister Rd.
Teterboro, N.J. 07608
201-288-2400

New York — Upstate
R. H. Britton Machinery Sales Inc.
7500 Victor Mendon Rd.
Victor, N.Y. 14564
716-924-9335 R. H. Britton Machinery Sales Inc. 6399 E. Molloy St. E. Syracuse 13057 315-437-3309

North Carolina
Jeffreys Engineering
& Equipment Company
2507 South Elm St.
Greensboro 27420
919-274-6364

North Dakota The Satterlee Company 2020 West 1st St. Duluth, Minn. 55806 218-727-8454

Ohio — Northeastern Garco Machinery, Inc. 6670 Beta Drive Mayfield Village, Ohio 44143 216-473-0050

Ohio — Northwestern
Oatis Machinery Company
4030 Dewey St.
Toledo 43612
419-476-4821

Ohio - Southwestern C. H. Gosiger Machinery Company 108 McDonough St.

Dayton 45402 513-228-5174 Oklahoma

MARSUCO 520 N. Villa Oklahoma City 73107 405-232-8836 MARSUCO 1050 E. Archer St. Tulsa 74101 918-584-5271

Oregon Star Machinery Company 3461 N.W. Yeon Ave. Portland 97210 503-226-3011

Pennsylvania — Eastern Lemuel R. Lance, Inc. Philadelphia Industrial Park 10400 Drummond Rd. Philadelphia 19154 215-824-3400

Pennsylvania — Southwestern Tri-State Machinery Company 535 McNeilly Rd. Pittsburgh 15226 412-344-6500

Pennsylvania — Western Boldt Machinery & Tools, Inc. 4803 Pittsburgh Ave. Erie 16509 814-833-9836

Rhode Island The Robert E. Morris Company 160 Wells St. Newton Centre, Mass. 02159 617-964-1500

South Carolina
Jeffreys Engineering
& Equipment Company
2507 South Elm St.
Greensboro, N.C. 27420
919-274-6364

South Dakota The Satterlee Company 2200 E. Franklin Ave. Minneapolis, Minn. 55404 612-370-2511

Tennessee R. O. Deaderick Company, Inc. 423 Depot N.W. Knoxville 37901 615-524-2537

Texas — Northern Oliver H. Van Horn Company, Inc. of Fort Worth 451 South Main St. Ft. Worth 76101 817-335-4484

Texas — Southern Rex Supply Corporation 3715 Harrisburg Blvd. Houston 77001 713-222-2251 Rex Supply Corporation 6021 Rittiman Plaza San Antonio 78218 512-828-1408 Rex Supply Corporation 4528 Baldwin Corpus Christi, Texas 78408 512-883-9353

Utah Richard Ives Company 533 South 300 West Salt Lake City 84101 801-328-3181 Vermont The Robert E. Morris Company 160 Wells St. Newton Centre, Mass. 02159 617-964-1500

Virginia Jeffreys Engineering & Equipment Company 2507 South Elm St. Greensboro, N.C. 27420 919-274-6364

Washington Star Machinery Company 241 So. Lander St. Seattle 98124 206-623-0760 Star Machinery Company E. 328 Sprague Ave. Spokane 99202 509-747-6121

West Virginia
Tri-State Machinery Company
535 McNeilly Rd.
Pittsburgh, PA 15226
412-344-6500

Wisconsin Midwest Machinery, Inc. 3401 W. Lincoln Ave. Milwaukee 53215 414-384-1166

Wisconsin — Western The Satterlee Company 2200 E. Franklin Ave. Minneapolis, Minn. 55404 612-370-2511

Wyoming Richard Ives Company 1220 South Lipan St. Denver, Col. 80223 303-744-1205

Canada — Alberta A. C. Wickman, Limited #2-9750-51 Ave. Edmonten, T6E 0A5 403-434-5095

Canada — British Columbia A. C. Wickman, Ltd. 7779 Edmonds St., Suite 5 Brunaby V3N 1B9 604-524-8744

Canada — Ontario A. C. Wickman, Limited 605 James St. North Hamilton LBL 1J9 416-528-9849

A. C. Wickman, Limited 1425 The Queensway Toronto M8Z IT4 416-259-2311 A. C. Wickman, Limited 411 Riverside Dr. E. Windsor N9A 2S9 519-253-1841

Canada — Quebec A. C. Wickman, Limited Grand Terminai Bldg. R. 280 7800 Cote de Liesse Rd. Montreal H4T 1G1 514-731-8247

Mexico Leon Weill, S.A. P.O. Box 1841 Mexico 1, D.F. 585-17-48

Puerto Rico Superior Machinery, Inc. Calle 6 NE, #1213 Puerto Nuevo Norte San Juan, PR 00920 809-783-8960

Bridgeport Machines 500 Lindley Street Bridgeport, Connecticut 06606 203-367-3651

